
SCIENCE STANDARD 3

All students will develop an understanding of how people of various cultures have contributed to the advancement of science and technology, and how major discoveries and events have advanced science and technology.

Curiosity is a human trait and, therefore, science is a human endeavor. Virtually all cultures have recorded their attempts to make sense of the world they live in, and this has provided science with a rich and fascinating history. To fully appreciate today's scientific achievements, students must learn that our present-day theories emerged over time, are based on the contributions of many, and will, in turn, be replaced by tomorrow's discoveries.

While the best place to begin implementing this standard with younger students is by providing them with a good story, the standard should be seen as more than simply a directive to supplement science instruction with anecdotal references to people and events. Rather, the intent is threefold:

- To show students that scientific ideas and theories have a history of their own by tracing the evolution of our most important present-day paradigms
- To fully integrate the impact of scientific and technological advances—and the people who made them—in each student's understanding of history
- To present science as an ongoing human activity, contributed to by people of all cultures, subject to inherent limitations, and influenced by the social and political climates of the time

Once again, the reader is referred to *Benchmarks for Scientific Literacy* (chapter 10) for a discussion of the major events in the history of science.